

Traffic and volume Study of Guru Gram Haryana

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Abstract- Traffic structuring utilizes building methodologies and strategies to achieve the safe and time capable improvement of individuals and items on roadway. The safe and time capable improvement of the people and items is depends upon traffic stream, which is clearly identified with the traffic properties. The three principal limits of a traffic stream are volume, speed and thickness. Without fruitful organizing and traffic the administrators of the town, the current road structure can't give food the more drawn out term needs of city. Individual by walking and vehicle volumes have extended in a general sense inside the most forward-thinking decade because of the distinction inside the monetary issues of the work families. The current work inspects traffic qualities inside the city of Guru-gram at picked need crossing points. During this work complement was given on traffic volume and along these lines the assessment was brought out through fundamental traffic stream learns at the picked crossing points in Guru-gram city. Traffic stream is focused by manual procedures. For better understanding of the current status of traffic stream at the crossing point, traffic study is driven. Traffic volume is normally conveyed with respect to PCU. With the assistance of the information collection, an endeavor had been made to get a handle on the traffic structures during different time periods. Control at that convergence is also dependent upon the traffic stream qualities. In this way the results from the current examination are helpful in controlling the traffic at the intersection point and besides in proposing a portion of the restorative measures to upgrade the traffic security inside the area

1. Introduction-

“For Haryana State, both Faridabad and Gurgaon city are very important. Both are very close to Delhi and both have taken full advantage of being closer to the Capital. Faridabad was developed first and became the home of many famous industrial houses. This is also an important place where lakhs of people are living as permanent residents. Although development of Gurgaon City started little latter growth rate of development was much faster than Faridabad. Many multinational companies have established their offices and factories there. As residential area development of Gurgaon city is phenomenal. Crow fly distance between Gurgaon Railway Station and Faridabad Railway Station is about 30 km but their mutual accessibility is limited. There is only one road which is connecting both the cities is

Gurgaon – Faridabad Road starting from MG Road –SusantLok-Mandi-Pali-Badkhal-to Faridabad Railway Station(about 35 km). To travel from Gurgaon to SaraiChawk one has to take Gurgaon-Mehrouli-Badarpur Road which is passing through Delhi. The distance is approximately is 27 km. Residential Population of both cities have exceeded one million and there are thousands of people living in Gurgaon and working in Faridabad (and vice versa). Therefore the Government of Haryana is contemplating to connect both the cities via metro rail which will not touch Delhi”[4] “Traffic structuring utilizes building methodologies and strategies to achieve the safe and time capable improvement of individuals and items on roadway. The safe and time capable improvement of the people and items is depends upon traffic stream, which is clearly identified with the traffic properties. The three principal limits of a traffic stream are volume, speed and thickness. Without fruitful organizing and traffic the administrators of the town, the current road structure can't give food the more drawn out term needs of city. Individual by walking and vehicle volumes have extended in a general sense inside the most forward-thinking decade because of the distinction inside the monetary issues of the work families. the current work inspects traffic qualities inside the city of Gurugram at picked need crossing points. During this work complement was given on traffic volume and along these lines the assessment was brought out through fundamental traffic stream learns at the picked crossing points in Gurugram city. Traffic stream is focused by manual procedures. For better understanding of the current status of traffic stream at the crossing point, traffic study is driven. Traffic volume is normally conveyed with respect to PCU. With the assistance of the information collection, an endeavor had been made to get a handle on the traffic structures during different time periods. Control at that convergence is also dependent upon the traffic stream qualities. In this way the results from the current examination are helpful in controlling the traffic at the intersection point and besides in proposing a portion of the restorative measures to upgrade the traffic security inside the area smooth working of transportation structure. inside the occasion that volume data isn't found on perpetual reason than the transportation structure may miss the mark and in this way the economy of the state may stand up to an incredible difficulty.

Traffic volume count should be conceivable by various procedures relying on various factors like work available, spending plan, development/instrument open, and significance of traffic data required or to be assembled. Traffic volume check are regularly described or unclassified. There are essentially two systems for social event the traffic data. they're manual methodology and customized strategy. the first broadly known procedure for traffic volume count is that the manual technique which joins a social event of individuals recording number of vehicles passing on a pre-chosen region. This methodology are regularly exorbitant to the extent work, yet it's indispensable by and tremendous where modified strategies can't be used because of nonattendance of establishment, fundamental endorsement then on. In customized methodology for volume count various instruments are used for get-together traffic volume data, for

example, pneumatic chambers, inductive circles, and state something development sensor, littler scope millimeter wave radar identifiers and camcorder. The main favored situation of methods for customized recorders is that they will work for the term of the day and night for the ideal time span , recording the whole hourly volume of traffic. Traffic volume isn't steady. It shifts at each point with time. There are three critical cyclic assortments. Hourly Pattern: The traffic stream trademark varies in Morning, Evening and Night. Most outrageous hourly volume of traffic said to be top hourly volume. A day Pattern the regular assortment reliably. Month to month and yearly Pattern: The season-to-season assortment reliably". [1-3]

1.2. Purpose of Study

The examination of traffic volume at explicit zone is imperative to full fill the going with reason.

- a. To choose the sizes, request and time of vehicular stream.
- b. To choose the apex hour volume in PCU.
- c. Design sign cycles time.
- d. Intersection arrangement and improvement reason.
- e. Traffic organization reason.

1.3. Study Location and Used Method

The assessment was aimed at SaradarVallabhai Patel Circle (SVP Circle) in the city. The procedure got is manual count strategy. The reasons behind decision of this system are according to the accompanying.

- a. Simple and direct.
- b. Classified vehicle count can be gotten.
- c. Data can be used after collection.
- d. No uncommon sorts of apparatus required.
- e. Not over the top.
- f. Easy to accumulate data.

It is otherwise called Timmapuri circle, which witness the traffic clog during the top hours. The SVP circle is situated at the focal little bit of the Gurugram city. The focal transport stand street, court street, railway station street, advertise street and PDA building school street

converge at the SVP Circle. The examination was led by manual tally technique by checking the no. of vehicles going into intersection from all the associating streets.

1.4 Length Counting

The investigation was led from 12 to 17 Feb. 2018 and time picked within the investigation was 7am to 9pm which includes morning top hours, evening top hours and night top hours stream. The traffic information gathered within the examination was by consistent strategy for manual checking, in light of the very fact that the knowledge acquired by this system is progressively dependable at that time transient manual tallying technique.

1.5 Traffic Characteristics

There are various kinds of vehicles present within the heterogeneous hour gridlock, with the top goal of this examination, were gathered into eight distinct classifications as follows.

- a. Motorized bikes (M.T.W), which incorporate engine cycles, bikes
- b. Motorized three-Wheelers which incorporate Auto-carts – three wheeled mechanized par transit vehicles to convey a limit of three travelers and rhythms – three wheeled mechanized vehicles to convey little amounts of merchandise
- c. Cars incorporate jeeps and tiny vans

2. Light business vehicles (LCV) including huge traveler vans and tiny four wheeled products vehicles

Tricycle which includes cycle-cart three wheeled pedal sort par transit vehicles to convey a limit of two travelers and three wheeled pedal sort vehicles to convey modest quantity of merchandise over short separations.

3. Results

From the applied Manual Count Method, these are the accompanying outcomes were watched, the information referenced in the accompanying tables are normal of seven days traffic volume information. Fig1 & 2

Proposed Route Alignments

(1).	Faridabad- Badkhal Enclave- Gurgaon Elevated -24.7 Km, At grade-11.4 Km (Including 2no Ramps) (Red)	36.1 Km
(2).	Faridabad-Badkhal Enclave-Tughlakabad Faridabad-Badkhal Enclave being common in S.No (1) &(2) the effective length between Badkhal Enclave to Tughlakabad (Yellow)	22.6 Km 12.1 Km
	Total Length for Study (36.1 Km + 12.1 Km)	48.2 Km

LOCATION	ROAD	VEHICLE	PCU	PASSENGER
SURAJ APT	SURAJ BDK ROAD	15274	14825	37704
CHARMOOD VILL	SURAJ BDK ROAD	59094	52722	143358
MRIU	SURAJ BDK ROAD	47966	45550	121448
ARIKHUR VILL	SURAJ BDP ROAD	27481	26832	63676
PALI CRASHER	PALI RD	30324	28533	62853
HANUMAN TEMPLE	GF ROAD	45826	40321	109145
NIFM	GF ROAD	48858	42899	131548
MASJID MOR	METRO RD	8530	7352	20520
SAINIK CHOWK	SOHNA-BADKHAL RD	46317	43497	124262
MANGAR VILL	GF ROAD	42580	36812	108199
BALIABAS VILL	GF ROAD	52401	49520	127683
SEC 42 CROSS	GF ROAD	31479	29365	94949

Fig.1 & 2 Showing Alignment & Capacity as per PCU

4. Conclusion

Coming up next are the significant ends drawn dependent on this examination:

1. Light vehicles (vehicle, Jeep, and so forth) involved 35-37 % of the complete vehicle on focal transport Stand Street, Station Street and Market Street
2. The level of three wheelers is moderately high around 54 % of the absolute vehicle on the station street.
3. The level of bikes is exceptionally high around 86 % on PDA designing School Street and 53% on Court Street.
4. The Percentage of open vehicle is less should be fortified
- 5.PCU estimation of a vehicle fundamentally changes with change in rush hour gridlock volume.

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